

# Kitty Hawk Beach Nourishment

## Proposed County Funding Plan

# Overall Goals – Infrastructure Protection – Highway 12



# Overall Goals – Infrastructure Protection – US 158



# Overall Goals – Infrastructure Protection – US 158

- \* Major Artery for all facets of Dare County economy
- \* Major evacuation corridor
- \* Major supply corridor post event
- \* Major re-entry corridor for post storm recovery



# Overall Goals – Infrastructure Protection – Between Highways



# Overall Goals

- \* Protect between highway properties and businesses from flooding during hurricanes, northeasters and other storm events
- \* Provide continuity of beaches throughout the towns in the county to maintain tourism industry

# County Goals In Funding Proposal

- \* Achieve overall goals from previous slides
- \* Leverage County dollars to provide as much sand on beaches as possible
- \* Maintain funds sufficient to cover 1 year debt service on all projects (~\$8.8 mil)
- \* Accumulate fund balance during life of projects to assist all towns in maintenance after 5 years (~\$22 mil)

# County Goals

- \* Towns must contribute some amount to the projects
- \* Fair method of distribution of County funds
- \* Must have funds available to assist in nourishment in Rodanthe and/or Buxton



# Difficulties

- \* Timing
- \* Unequal project scope
- \* Unequal tax bases

# Solutions - Timing

- \* Added permitting & design costs to get all projects on same schedule
- \* All projects on same schedule should result in 17% savings on total cost of all town projects
  - \* Design, permitting, bid and construction
  - \* Engineer's estimate

# Solutions - Unequal Project Scope

- \* Based all cost projections on 75 cubic yards per linear foot
  - \* Same scope as Nags Head project
- \* Allowed “apples to apples” comparison
- \* Towns that want to do more can do so at their own cost

# Solutions – Unequal Tax Bases

- \* Ran multiple models in effort to achieve fair allocation of County funds
- \* Low relative value of Kitty Hawk tax base vs. other towns made Kitty Hawk unaffordable if use pro rata distributions based upon length or cubic feet
- \* Cost per tax parcel of Nags Head project averaged 7.82 cents of property tax
  - \* More in Municipal Service District and less town-wide

# Solutions - Models

- \* Determined what County Beach Nourishment Fund could contribute
  - \* Upfront cash
  - \* Annual debt service
- \* Initial consensus model = 7.82 cents per parcel to all towns

# Solutions

- \* Towns use Nags Head financing model
  - \* Each issues Special Obligation Bonds
    - \* Requires upfront cash in order to secure financing
- \* County projects use Installment Financing
  - \* Requires pledged property/collateral
  - \* If pledge sufficient, no upfront cash required



# Proposed Plan

- \* Is a proposed plan
- \* All boards have seen but plan has not been approved by any Board
- \* May be tweaked if necessary to better accomplish goals
- \* Need to finalize in October in order to meet constructions timelines
- \* Is based on cost assumptions provided by engineers and interest cost assumption based on projected market conditions. Both can change.

# Cost Estimates

## Towns

- \* Individually \$50,854,000
- \* Combined \$42,670,000

County \$25,000,000

# Town Cost Estimates

	Permitting (1)	Construction	Total
Duck	\$750,000	\$13,693,816	\$14,443,816
Kitty Hawk	\$870,000	\$15,645,159	\$16,515,159
Kill Devil Hills	\$550,000	\$10,412,691	\$10,962,691
Totals	\$2,170,000	\$39,751,666	\$41,921,666

(1) #'s shown are less \$250,000 each, paid from FY 2014  
County Beach Nourishment Fund budget

# KH Total Cost Distribution

with interest @ 3.5%

* Town debt service contribution:	\$ 3,938,650
* Total County BNF contribution:	
* Upfront contribution	\$10,300,000
* Debt service	\$ 3,037,866
* Total	<u>\$13,337,866</u>
* Total cost w/ debt service	\$17,276,516

# Kitty Hawk

Debt Service on \$6,215,159 @3.5%

	Debt Service	From County	From Town 7.82 cents
2016	\$108,765		\$108,765
2017	\$1,460,562	\$694,586	\$765,977
2018	\$1,417,056	\$651,079	\$765,977
2019	\$1,373,550	\$607,573	\$765,977
2020	\$1,330,044	\$564,067	\$765,977
2021	<u>\$1,286,538</u>	<u>\$520,561</u>	<u>\$765,977</u>
Totals	\$6,976,516	\$3,037,866	\$3,938,650

# Conclusion

- \* All towns in County with substantial oceanfront erosion problem will be nourished
- \* Some or all funds (depending on future erosion rates) necessary to maintain the nourished beaches will be available
- \* Goals outlined above will be met
- \* Cost to the individual taxpayer in all towns with nourished beaches will be the same